

First ISCCP Regional
Experiment (FIRE) Cirrus
2 National Oceanic and
Atmospheric
Administration (NOAA)
Wind Profiler Langley
DAAC Data Set
Document



Summary:

The First ISCCP Regional Experiments have been designed to improve data products and cloud/radiation parameterizations used in general circulation models (GCMS). Specifically, the goals of FIRE are (1) to improve the basic understanding of the interaction of physical processes in determining life cycles of cirrus and marine stratocumulus systems and the radiative properties of these clouds during their life cycles and (2) to investigate the interrelationships between the ISCCP data, GCM parameterizations, and higher space and time resolution cloud data.

To-date, four intensive field-observation periods were planned and executed: a cirrus IFO (October 13 - November 2, 1986); a marine stratocumulus IFO off the southwestern coast of California (June 29-July 20, 1987) a second cirrus IFO in southeastern Kansas (November 13 - December 7, 1991); and a second marine stratocumulus IFO in the eastern North Atlantic Ocean (June 1 - June 28, 1992). Each mission combined coordinated satellite, airborne, and surface observations with modeling studies to investigate the cloud properties and physical processes of the cloud system.

This document provides information for the FIRE_CI2_NOAA_WNDPFS data set.

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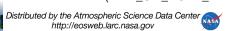
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1. Data Set Overview:

Data Set Identification:

FIRE_CI2_NOAA_WNDPFS:

First ISCCP Regional Experiment (FIRE) Cirrus 2 National Oceanic and Atmospheric Administration (NOAA) Wind Profiler Data (FIRE_CI2_NOAA_WNDPFS)



Data Set Introduction:

Source/Platform Mission Objectives:

The N	NOAA wind profile	s were	collected	d during	the perio	od from	Nov. 13	3, 199 ⁻	1 to Dec	. 7 1991	. The	e origina	l data w	ere	stored in	the	Enhanced
Binary	/ Universal Form ((EBUF)	format.	These da	ata files	have be	en refo	rmatte	ed and a	re provid	ded (in ASCII	format)) by	the Langl	еу [DAAC.

The NOAA wind profiles were collected during the period from Nov. 13, 1991 to Dec. 7 1991. The original data were stored in the Enhance Binary Universal Form (EBUF) format. These data files have been reformatted and are provided (in ASCII format) by the Langley DAAC.
Objective/Purpose:
Summary of Parameters:
Ground Height Wind Speed
Discussion:
Related Data Sets:
2. Investigator(s):
Investigator(s) Name and Title:
Title of Investigation:
First ISCCP Regional Experiment (FIRE)
Contact Information:
Gerald Mace Department of Meteorology Pennsylvania State University 503 Walker Building University Park, PA 16802 USA Telephone: (814) 863-4722 FAX: Email: MACE@ESSC.PSU.EDU
3. Theory of Measurements:

4. Equipment:
Sensor/Instrument Description:
Collection Environment:
Source/Platform:
GROUND STATION

Distributed by the Atmospheric Science Data Center http://eosweb.larc.nasa.gov

Data Set Name	Min Lat	Max Lat	Min Lon	Max Lon
Spatial Coverage	е Мар:			
Spatial Coverage	e:			
Spatial Chara	cteristics:			
7. Data Des	cription:			
Field Notes:				
Data Notes:				
6. Observat	ions:			
5. Data Acq	uisition Metl	noas:		
 E. Data Association		l1-		
	i iniormation:			
Other Calibration	n Information.			
Frequency of Ca	ilibration:			
	P1			
Tolerance:				
Specifications:				
Calibration:				
WIND PROFILER	2			
Sensor/Instrume	ent:			
Manufacturer of	Sensor/Instrumer	nt:		
Sensor/Instrume	ent Measurement (Geometry:		
Principles of Op-	eration:			
Ground Height Wind Speed				
Key Variables:				

Data Set Name	Min Lat	Max Lat	Min Lon	Max Lon	
FIRE_CI2_NOAA _WNDPFS	31.78	44.67	-106.35	-71.49	

Spatial Resolution:					
Projection:					
Grid Description:					
Temporal Characte	ristics:				
Temporal Coverage:					
Data Set Name	Begin Date	End Date			
FIRE_CI2_NOAA_WND PFS	11-13-1991	12-07-1991			
Temporal Coverage Ma	p:				
Temporal Resolution:					
Data Characteristic	s:				
Parameter/Variable:					
There are 10 variables in variables with their units a		record. Variables are separated w.	I by white space(s).	The variable values are	e left-justified. These
Variable Na	ıme	Unit			

Height above station	Meters
Signal Power (0th moment) North	Decibels
Signal Power (0th moment) East	Decibels
Signal Power (0th moment) Vertical	Decibels
Mean Velocity (1st moment) North	Meters/Second
Mean Velocity (1st moment) East	Meters/Second
Mean Velocity (1st moment) Vertical	Meters/Second
Velocity variance (2nd moment) North	(Meters/Second)**2
Velocity variance (2nd moment) East	(Meters/Second)**2
Velocity variance (2nd moment) Vertical	(Meters/Second)**2

Variable Description/Definition:

See above.

Unit of Measurement:

See above.

Data Source:
Data Range:
Sample Data Record:
8. Data Organization:
Data Granularity:
A general description of data granularity as it applies to the IMS appears in the <u>EOSDIS Glossary</u> .
The NOAA wind profiles data set consists of 25 ASCII files. A NOAA wind profiles file has multiple windprofiles records. Each file is named ci2_noawnd_yymmdd_6m, where yy is the year, mm the month, and dd the day when the data were collected. A wind profiles record starts with three header lines, followed by three lines of column headings, followed by windprofile data, and ends with the parameter "Profiler in checkout mode flag" line. The first header line contains date and time values, the second header line contains station latitude and longitude values, and the third header line contains the values for the parameters "height of station above sea level" and "height increment".
Data Format:
The data are in ASCII format.
9. Data Manipulations:
Formulae:
Derivation Techniques and Algorithms:
Data Processing Sequence:
Processing Steps:
Draggering Changes:
Processing Changes:
Onlanda Carran
Calculations: Special Corrections/Adjustments:
Calculated Variables:
Granhe and Plote:
Graphs and Plots:
Image files are not available for this data set.
10. Errors:
Sources of Error:

Quality Assessment:	
Data Validation by Source:	
Confidence Level/Accuracy Judgement:	
Measurement Error for Parameters:	
Additional Quality Assessments:	
Data Verification by Data Center:	
11. Notes:	
_imitations of the Data:	
Known Problems with the Data:	
··	
Jsage Guidance:	
Any Other Relevant Information about the Study:	
12. Application of the Data Set:	
13. Future Modifications and Plans:	
There are no plans to modify these data sets.	
14. Software:	
Software Description:	

Sample read software is available for this data set.

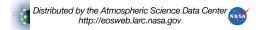
Software Access:

The software can be obtained through the Langley DAAC. Please refer to the contact information below. The software can also be obtained at the same time the user is ordering this data set.

15. Data Access:

Contact Information:

Langley DAAC User and Data Services Office NASA Langley Research Center Mail Stop 157D Hampton, Virginia 23681-2199



USA

Telephone: (757) 864-8656 FAX: (757) 864-8807

E-mail: support-asdc@earthdata.nasa.gov

URL: http://eosweb.larc.nasa.gov

Data Center Identification:

Langley DAAC User and Data Services Office NASA Langley Research Center Mail Stop 157D Hampton, Virginia 23681-2199 USA

Telephone: (757) 864-8656 FAX: (757) 864-8807

E-mail: support-asdc@earthdata.nasa.gov

URL: http://eosweb.larc.nasa.gov

Procedures for Obtaining Data:

The Langley DAAC Information Management System (IMS) is an on-line system that features a graphical user interface (GUI) that allows to query the Langley DAAC dataset holdings, to view pre-generated browse products, and to order specific data products. Users may also request data by letter, telephone, electronic mail (INTERNET), or personal visit.

The Langley DAAC User and Data Services (UDS) staff provides technical and operational support for users ordering data. The Langley DAAC Handbook is available in a postscript file through the IMS for users who want detailed information about the Langley DAAC holdings. Users may also obtain a copy by contacting:

Langley DAAC User and Data Services Office NASA Langley Research Center Mail Stop 157D Hampton, Virginia 23681-2199 USA Telephone: (757) 864-8656

FAX: (757) 864-8807

E-mail: support-asdc@earthdata.nasa.gov

URL: http://eosweb.larc.nasa.gov

Data Center Status/Plans:

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16. Output Products and Availability:

There are no output products available at this time.

17. References:

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18. Glossary of Terms:

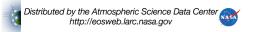
EOSDIS Glossary.

19. List of Acronyms:

NASA - National Aeronautics Space Administration URL - Uniform Resource Locator

EOSDIS Acronyms.

20. Document Information:



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Document Curator:

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